

ABSTRACT

A system and method for the in-situ removal or remediation of contaminants in a soil formation containing a subsurface groundwater aquifer, the method comprising the steps of: injecting a first oxidant into the aquifer at an injection point to create a volume of influence of the first oxidant in the aquifer thereby treating the contaminants contained within the volume of influence; and injecting a compressed gas into the aquifer to increase the size of the volume of influence of the first oxidant. The injection of the compressed gas into the aquifer can also force the groundwater in the aquifer away from the injection point into a surrounding area to transport the first oxidant into the surrounding area thereby extracting contaminants from soil adjacent to the surrounding area.